



SAINT LOUIS AUDUBON SOCIETY

BULLETIN

JANUARY - FEBRUARY 1985

EAGLES-EAGLES-EAGLES

The Saint Louis Audubon Society will participate in the annual Northern Bald Eagle Count again this year. This is our twentieth year of counting in this same location.

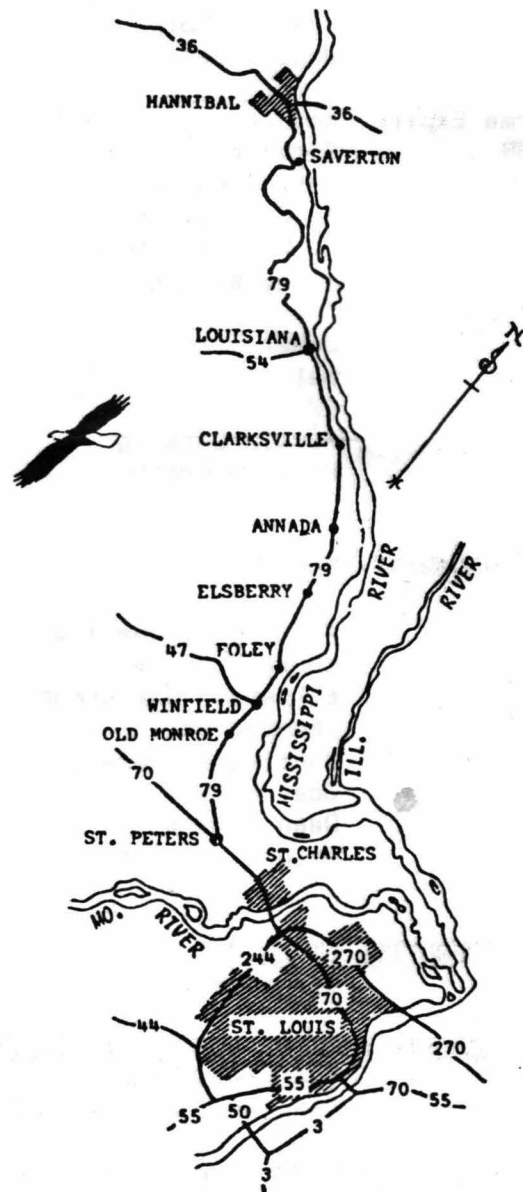
SATURDAY, FEBRUARY 2, is the date, and the area from Winfield Dam north to Saverton will be covered,

Arrangements are being made to recruit a staff of experienced ornithologists as leaders. They will map the area to be covered and assign locations.

Meet at Winfield Dam at 9:00 a.m. Follow Interstate 70 to St. Peters, then north on Highway 79 to Winfield Dam.

This annual Northern Bald Eagle Count is a special project. Children, youth groups and first-time counters are most welcome. Dress for cold weather and bring binoculars and a sack lunch.

For further information call Saint Louis Audubon Society, 965-8642.



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THE WOODPECKERS FAVORITE WOODLAND BIRDS

Barbara Perry Lawton

The woodpeckers are a flashy group of resident birds whose coloring generally features touches of bright red plus patterns of white and black. Their staccato, often raucous calls are familiar sounds in the woods as well as in older suburbs with well-spaced lots and many trees. Generally solitary birds, I've never seen them in flocks and, only rarely, as obvious pairs.

Woodpeckers, some 210 species in all, can be found in wooded areas of most parts of the world, except for Australia. Of the 21 species of woodpeckers native to North America, we have seven in the midwest region of the Mississippi River Valley. I don't include the ivory-billed woodpecker in the total list since it has long been presumed to be extinct. A number of other woodpeckers live in somewhat limited areas of the far North, South, West and Southwest.

The "flap-flap-flap-closed wings" pattern of woodpeckers in flight gives their passage through the air an undulating look that is hard to miss. This, plus the flashes of red, black and white make recognition comparatively easy. Their habit of landing upright on the side of trees or feeders is equally distinctive. The feet, sharply clawed, with two toes fore and two aft, and the spiny tips of the tail feathers make these tree-side acrobatics possible.

The woodpeckers are members of the Picadae family, in the order Piciformes. Field guides describe them as having strong chisel-like bills with sharp points, well suited for drilling, picking and chipping into tree trunks and branches. The bill and remarkably long tongue make it possible for these birds to find and eat wood-boring insects and other creatures that live in the superficial layers of woody plants. Their diet may include berries, acorns and sap as well as insects.

Fortunately for us, most woodpeckers will come to our back yards to feed on suet that is hung fairly high in mesh bags or wire containers. This means that we can have the opportunity to study them up close and learn more about their habits. One time, I was truly lucky to see the fairly unusual pileated woodpecker come to my suet feeder. More often, I see the downy and hairy woodpeckers, the red-bellied, the red-head and the flicker. I've not had the yellow-bellied sapsucker at my feeder, to my knowledge. I generally begin feeding the woodpeckers in September and continue through April. After that, the natural foods are again abundant and they will not come to feeders as readily. They are a sturdy bunch and will active in just about any kind of weather.

Woodpeckers -2- Lawton

Woodpecker nests are in hollows of trees, often in a cavity that has been chiseled well down into a trunk or branch below the entry hole. At the bottom of the cavity, four to eight white eggs usually are laid. Woodpeckers do not make nests in these cavities -- they merely lay the eggs on the wood chips and surface of the wood. "Most woodpecker species spend a few weeks at the start of each breeding season digging in dead wood, or enlarging some other bird's digs, to create one new cavity per pair," said Michael Harwood in "Audubon Magazine" (1984).

Woodpeckers of most species, at some time or other, will "drum" on hard poles, limbs or other objects, including guttering and drainpipes. Perhaps this is a territorial kind of activity, but no one really seems to know. Once a woodpecker has found your gutterings and downspouts to his liking, you may be awakened at dawn each day by the insistent hammering -- the noise can be loud, even deafening, depending upon the resonance of the guttering. About the only cure for this is to run outside in your bathrobe, screaming and flapping your arms. Neighbors will be impressed. With luck, the woodpecker will move to someone else's gutters.

Most common of our woodpeckers is the littlest of the group, the downy woodpecker, a neighborly sort that is quite tame, allowing fairly close observation. Least common of our native woodpeckers is the largest, the pileated woodpecker who looks ever so much like a relic from prehistoric times. It is this bird that provided the pattern for one of our children's favorite cartoon characters, Woody Woodpecker.

RED-HEADED WOODPECKER (*Melanerpes erythrocephalus*)

Handsome and very flashy is the red-headed woodpecker with its brilliant red head, white belly and wings of black and white. The sexes are alike in coloration. The body length is about 8.5 to 9.5 inches and the wing spread is 16 to 18 inches. Found in orchards, open woods and in the scattered trees of fields, it is not a bird of the deep forest.

"The red-head is the most domestic of our woodpeckers, living frequently in the heart of populous towns and nesting in telephone poles on village streets. The birds are especially attracted to newly cleared lands, where many dead or girdled trees are left standing," Arthur H. Howell (1932) reported in Arthur Cleveland Bent's "Life Histories of North American Woodpeckers."

Throughout the year, the red-head's diet consists of about one-third animal and two-thirds vegetable matter, according to Edward Howe Forbush in his "Birds of Massachusetts and Other New England States." Destructive insects comprise a good bit of its diet. Acorns, fruit and corn also may be part of the diet. This bird may store some of its food under loose bark

Woodpeckers -3- Lawton

and in knot holes and tree cavities.

Incubation of four to seven eggs takes about 14 days and the newly hatched young are naked with extremely long necks. Bent's book notes that the young are fed at varying intervals, sometimes every three to four minutes and at other times only every 15 to 20 minutes. Once the young are fledged, the parents often raise a second brood and, at that time, will drive away the young birds of the first brood.

Ornithologists have reported that the red-head will rob other birds' nests, carrying off both eggs and young. Further, some have reported that red-heads will strip fruit from cherry trees and strawberry plants. Perhaps this was so when the birds were much more common. Today, at least in our region, the red-head's attributes are such that we should enjoy and admire his presence without worrying about possible faults.

In 1842, Audubon wrote about the red-head: "with the exception of the mocking-bird, I know of no species so gay and frolicsome. Indeed, their whole life is one of pleasure. * * * They chase each other on wing in a very amicable manner, in long, beautiful curved sweeps, during which the remarkable variety of their plumage becomes conspicuous, and is highly pleasing to the eye."

PILEATED WOODPECKER (DRYOCOPUS PILEATUS)

Largest of all the North American woodpeckers is the pileated which matures at an impressive 16 to 19.5 inches in length, with a wingspread of 28 to 30 inches. In earlier days, the pileated woodpecker also was known as the log-cock or cock-of-the-woods. Its bill is at least as long as the head and the bright red crest tops the white-striped black head. The male has a red "mustache" which differentiates it from the female. The body and tail are black and the dark upper wings contrast with the flashy white of the underwings which are bordered by black flight feathers.

The diet of the pileated consists primarily of ants plus beetles and their wood-boring larvae. This bird eats comparatively little vegetable food, mainly berries of the woods that are not commonly considered fit for human consumption. Ants are far and away the favorite food. "Except the flicker this is the only species of Woodpecker I have observed feeding on the ground, but this species likes to tear open the ant hills found in open places in the woods and feed on the ants and their larvae," wrote Ora W. Knight (1908).

Bent reports that the only other drumming rolls that are comparable in intensity to those of the pileated are those of the yellow-bellied sapsucker. "This roll is composed of twelve strokes or blows, forming an ascending and descending climax; increasing in rapidity and volume to the middle and dying in force and rapidity just as it began. * * * I had often heard

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this roll a full mile and a half away; once or twice I had even heard it in the house with doors and windows closed!" wrote Ernest Waters Vickers (1915).

The birds return year after year to the same nesting location, often to the same tree trunk. The nest chamber is from 10 inches to two feet deep, averaging just under 20 inches in depth, with a diameter that ranges from seven or eight inches at the top to a six-plus-inch bowl at the bottom. Usually three or four eggs are laid in a clutch, with the adults taking turns at incubation every two hours or so.

The young are fed by regurgitation and each adult awaits the other before leaving once again to search for more food. The adults are very quiet whenever they are in the nesting area. That quiet ceases once the young are old enough to meet the parents at the nest hole. Then the young birds stretch out their heads, always hungry, rasping their constant calls for more food.

Although it drums and calls with frequency during early spring, the pileated becomes quiet during the breeding season. The loud sharp staccato of the call does, indeed, remind one of Woody Woodpecker and you would think that such a bird would be easy to see once the call is heard. That this bird is little known is surprising considering its large size. The reason is clear, according to Bent: "It is a forest dweller; it lives almost wholly within the canopy of the treetops; it is alert, furtive (almost) as a bear, rather silent in midsummer (the season when city dwellers ordinarily visit the northern forests); and it easily eludes observation."

COMMON (YELLOW-SHAFTED) FLICKER (Colaptes auratus)

The flicker's deeply undulating flight and loud repetitive call quickly draw attention to this handsome large bird which is 12 to 13 inches long with a wing spread of 18.5 to slightly over 21 inches. In flight, the white rump is obvious as are the yellow underwings. The gray cap has a red crescent below it on the back of the head. A black bib tops the black-speckled breast. The brown and black colors of the back and tops of the wings give a tweedy look to the flicker. The male's black "mustache" distinguishes it from the female.

Common throughout much of North America, the flicker is known by many common names -- partridge woodpecker is one of the more colorful. The familiar call of the flicker is a note of spring. In 1842, Thoreau wrote: "I have just heard a flicker among the oaks on the hillside ushering in a new dynasty. * * * How that single sound enriches all the woods and fields."

Flickers are found in lightly wooded areas and also open country. Favorite haunts are farms, orchards and wood lots as well as suburban neighborhoods where spacious grounds provide a perfect

Woodpeckers -5- Lawton

setting. During the cold season, flickers seek more shelter, preferring open woodlands and fields.

Flickers are very fond of ants. These as well as ground beetles, bugs, grasshoppers and crickets comprise close to two thirds of their diet, the rest consisting mostly of weed seeds and wild fruits. In the winter, the fruits of bayberry and poison ivy are favorite foods.

"The courtship of the flicker is an elaborate and somewhat puzzling performance. Two birds face each other on the branch of a tree or cling side by side, though at a little distance apart, on the trunk, and spread their tails and jerk their heads about in a sort of weaving motion, frequently uttering a note that is peculiar to this performance, a 'wick-up' or 'week-up.' The head motion is a series of backward jerks with the bill pointing up at an angle of perhaps 60 degrees and the head at the same time swinging from side to side," wrote ornithologist Francis H. Allen (1934).

Both male and female work on the nesting cavity, repairing an old one or excavating a new one. This may take from one to three weeks, followed by a period of a week or more before the eggs are laid. The birds appear to favor dead trees or dead stubs on living trees -- certainly this would make the job of excavation easier. In places where trees are few, flickers will site their nest holes in fence posts or telephone poles if they are made of a soft wood such as cedar. The nests will range from ground level to 90 feet or more. The nesting hole varies in depth from 7 to 18 inches.

The prolific flicker will incubate as many as ten lustrous white eggs, with six to eight being the average. The birds share the incubating duties which will last 11 to 12 days. The naked young grow quickly and, in only three weeks, are able to climb up to the entrance hole for feeding. A week later, the young birds are ready to leave the nest.

Flickers have an elaborate vocabulary that includes many more calls and notes than the other woodpeckers. The spring call, that long rolling series of notes, is usually performed from a high perch. This call continues somewhat through summer, tapering off to nothing in the fall. Other calls appear to be used conversationally with mates and young birds or, in some cases, purely for the flicker's own amusement.

YELLOW-BELLIED SAPSUCKER (Sphyrapicus varius)

A smallish bird, the yellow-bellied sapsucker just slightly smaller than the hairy woodpecker, with a body length of 7.7 to 8.8 inches and a wing span of 14.3 to 16.0. inches. Sapsuckers give the impression of being primarily black and white with a large white wing bar. The belly is yellowish and the forehead

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is marked by a striking red patch. The male has a red throat patch while the female has a white throat.

The yellow-bellied sapsucker is a migratory woodpecker, unlike our other natives which are with us all year long. The breeding territory is farther north and we are most likely to see this rather uncommon bird during winter months or during fall and spring migration. Where it does breed, in the northern states and Canada, nest holes are often found in high dead stubs. The entrance hole is so small that the bird must squeeze through to get inside. Four to seven eggs are laid and the noisy young are usually fledged in July. The adults continue to feed them for some time and the fast-growing youngsters are a playful bunch that stick together, chasing each other through the trees.

As the name suggests, the diet consists primarily of sap and the cambium layers of trees. W. L. McAtee (1911) concluded from stomach studies that these items constituted some 16.71 percent of the birds' diet. The remainder consists of wild fruits, ants and a great variety of other insects, including beetles and wasps.

It is this habit of eating tree sap and cambium that causes the sapsucker to be held in disrepute by some farmers and land owners. The birds drill regular rings of holes in fruit trees and ornamental trees, holes which may bleed and offer sites for fungal and other infections. Where the birds are common, these circles of regularly spaced holes are often seen on apple trunks and other trees. Among the experts, there is some discussion as to whether or not the trees are severely harmed. The sapsucker is not common in our region, therefore we need not be concerned about their damaging trees.

As the birds migrate through our area in the fall, Bent reports that single birds may settle in dooryard trees for a few days, perching well up in the branches and sticking to the immediate area. An inconspicuous bird, its colors blend in with the bark and it moves as if to avoid being noticed. It will pick at the bark in search of food, moving around the limbs and trunk, "taking long rapid hops, seeming careless of a fall. When investigating crevices and peering under flakes of bark it cranes its neck, turning its head from side to side. The neck then appears constricted, like a pileated woodpecker in miniature"

DOWNY WOODPECKER (*Picoides pubescens*)

Most common and most sociable of all our native woodpeckers is the downy, a black and white bird that is only 6.3 to 7.2 inches long, with a wing spread of 10.9 to 12.3 inches. It is found in nearly all the wooded areas of our country. The male has a red patch on the back of its head while the female has none. The back is white and the cheeks have two white stripes, one just above the eye, the other along the jaw line. The belly and outer tail feathers are white and small white markings give a banded

Woodpeckers -7- Lawton

appearance to the wings. This description up to this point is just as valid for the hairy woodpecker except that it is considerably larger.

The difference, other than size, between these two birds is that the downy has a comparatively small bill that is much less long than the head. The hairy woodpecker, on the other hand, has a stout bill that is about as long as its head. When seen together, there is no problem telling the two birds apart, but they are seldom seen together.

"The sprightly little downy, smallest of our woodpeckers, is an admirable bird. It sports no gay plumes and sings no song, but it is a model of patient industry and perseverance, and though it may take a little sap from some maple trees occasionally in early spring, the small amount that it requires will never be missed," Forbush writes. The downy is most often found in orchards, shade trees and at the edge of woods. It has adapted very well to suburban situations and is the most common woodpecker to visit suet feeders.

Like mating flickers, the downies in spring will chase each other from tree to tree, pausing only to perform a dance that involves spreading wings and tail feathers in a droll exhibition. Their call is long and somewhat like the flicker's, except that it is higher and much softer. The activities of courtship begin in March when the male begins drumming on tree trunks and branches. Competition by more than one male can be vigorous, with the males competing in display as well as trying to bluff one another with wings spread and crest raised.

Once a pair is mated, the birds drill a nest hole usually in dead and decaying wood, a branch or stub between eight and 50 feet high. "The pair work together for several days before the hole is completed, sometimes perhaps a whole week, as they dig it to a depth of a foot or sixteen inches. * * * The hole is rendered smooth and conveniently large throughout, the entrance being perfectly round, and just large enough to admit one bird at a time," wrote Audubon in 1842.

Four to five pure white eggs usually comprise the clutch. Hatching after 12 days, the naked young are fed entire insects by the time they are four to five days old. When the fledglings leave the nest, they will immediately take off -- with no prior practice -- flying directly from the entrance hole to a nearby tree, landing on the trunk in that distinctive way of the adults as if they had been doing this all along. Over three-fourths of the downy's diet consists of wood-boring larvae, weevils, ants, caterpillars and other small creatures, most of them considered destructive. The remainder of the diet includes wild fruits of no value to man.

The two toes in front plus two behind serve to clamp the bird to

trees. "Additional support is furnished by the stiff, sharply pointed tail-feathers, that act as a brace when the bird delivers heavy blows with its beak. Effective as this tool is for the work of hammer, wedge, drill and pick-axe, it could not obtain the deeply hidden grubs known as 'borers,' from their tortuous, tunneled grooves, without the aid of the long, slender, extensile tongue. In the case of the Hairy and the Downy, as well as some others of the family, this remarkable tool is provided with barbs, converting it into a spear, which may be hurled one inch, two inches or even more, beyond the tip of the beak," writes Mrs. Alice Hall Walter (1912).

Although, in the past, many observers asserted that the downy, like the sapsucker, drilled holes in trees to suck sap, this does not seem to be the case to any great degree, even though downies have been seen working at areas where sap has dripped or frozen.

Bent reports that the downy does not range widely in search of food during the winter. Rather, it remains near a roosting hole where it can gain protection from severe weather. Solitary in the winter months, the downy must have access to a territory that is large and productive enough to provide food that will last from frost to spring.

HAIRY WOODPECKER (Picoides villosus)

As already mentioned, the description of the downy will serve quite well for the hairy woodpecker, with the exception of general size and size of the bill. The hairy measures 8.5 to 10.5 inches in length with a wing spread of 15.0 to 17.5 inches, considerably larger than the tidy little downy. The beak of the hairy is comparatively larger and longer, appearing to be about the same length as the head.

The voice is, according to one field guide, like the kingfisher's rattle and runs together more than the downy's call. The wingbeats are vigorous and can be heard as the bird drives itself through the air. Although not as common nor as nonchalant as the downy, the hairy woodpecker can usually be found in most neighborhoods where there are many trees. This is a bird that is rather shy and found in deciduous woods, old orchards and heavily treed parks.

Loud drumming in the spring apparently substitutes for mating songs -- any resonant tree or pole will do. Louder but not as long as the roll of the downy, the hairy woodpecker's drumming precedes a courtship much like the downy's. The two birds chase one another from tree to tree, dodging among the branches as they cajol each other. Formal bowing is another part of the mating dance.

Both sexes work on the nesting hole which is usually in a dead tree in deciduous woods at a height of from five to 30 or more feet. The entry hole is usually very lightly elliptical and the

Woodpeckers -9- Lawton

cavity measures from 10 to 12 inches or even more in depth. Covering the bottom with fresh chips, the female lays three to six white eggs which will hatch in about two weeks. Both birds share the duties of incubation as well as the duties of feeding the young. For the first few days, the naked youngsters are fed by regurgitation. In only about three weeks, they are feathered and ready to leave the nest. The adults will continue feeding and caring for their brood for several weeks.

More than 75 percent of the hairy's food consists of injurious insects -- larvae of beetles, spiders, ants and caterpillars. The rest of the diet includes fruit, grain, seeds and miscellaneous vegetable substances. Hairy woodpeckers have been observed stripping potato bugs from potatoes and performing other similarly useful chores in gardens and on farms.

As already noted, the hairy is more shy than the downy, yet it is also more active as well as noisier, according to Bent. This is the bird that will dodge so skillfully behind a tree trunk as you try to catch a glimpse of it. Agile and strong, its movements from flight to perching and back again are worth noting. "The bird throws itself backwards from its vertical position by a leg spring, together with a tail movement, turns in the air in the fraction of a second and is sweeping away to the next perch," noted Dr. Morris Gibbs (1902).

Although considered a permanent resident, the hairy woodpeckers that you see in the winter may not be the same ones that you see in summer. Apparently, there is an inconspicuous and general movement southward of the entire population. In the winter, the hairy becomes much braver as food becomes scarcer. Then it will move out of the woods and begin to forage closer to civilization, feeding on suet in backyards where smaller birds defer to the hairy woodpeckers larger size. Although many hairy woodpeckers will excavate a roosting hole, others have been seen perching on the lee side of trees throughout the night.

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SAINT LOUIS AUDUBON SOCIETY EXECUTIVE DIRECTOR TO WED

Cornelia Hath and Sam Paul Crawford will be married on February 14, 1985 at the Webster Groves Christian Church. Mr. and Mrs. Crawford will live in Greenbriar Hills, Kirkwood, Missouri.

EAGLE SITUATION HEARTENING

JEFFERSON CITY — "It takes so long for a payoff," says Jim D. Wilson, "but we're optimistic that the payoff will come." Wilson is talking about a Missouri program to "hack" young bald eagles — a process of isolating flightless young eagles in an area, then releasing them at flight time and hoping they return in several years to nest. "The State of New York has been at this the longest," Wilson said, "and they had four eagles from their 1979 release return and nest this year."

Missouri has hacked a dozen young birds at Mingo National Wildlife Refuge in a cooperative venture between the U.S. Fish and Wildlife Service and the Department of Conservation. Of the 12, one died in a collision with a fence, and one of 1984's birds is still at Mingo; the others are unreported. There were two released in 1981, three each in 1982 and 1983, and four in 1984.

One of the 1982 birds was nicknamed "Adversity." He was the first known Missouri-hatched eaglet in more than 40 years and nearly died when his parents vanished from their Truman Lake nest site. As far as anyone knows, Adversity is still alive and potentially will nest at Mingo in the near future.

Two of this year's four birds came from Minnesota, one from Wisconsin, and one from a captive breeding program in East St. Louis.

One of the most heartening bits of national eagle news is that a pair of adult eagles nested successfully in the Land Between the Lakes region of western Kentucky. Most significant was that one of the two had been hacked at the area in 1981. It was the first successful eagle hacking-and-return in the southeast United States and only the fourth known.

The LBL eagle was born at the Columbus, Ohio zoo and released in the summer of 1981 at the Tennessee Valley Authority area. It gives heart to Missouri, which is involved both in trying to breed and hatch eagles and in hacking young eagles from elsewhere. Not only was the eagle successful in reproducing; it did so at a younger age — three — than any known eagle. Biologists have believed that eagles don't mature sexually until their fourth or fifth year.

LBL has hacked 14 young eagles while Missouri has launched 12. Immature bald eagles were seen around Mingo Refuge last summer, and the hope is that they are returnees from the hacking program.

Springfield's Dickerson Park Zoo has had an eagle breeding program for some time, but success has been frustratingly elusive. There hasn't been any problem getting eggs — nearly 40 of them — but the eggs die during the incubation process. Wilson thinks the reason is pesticide residues in the birds. (Analysis of the eggs showed residues of DDE, a metabolite of DDT, banned since 1972.) The chemicals cause thinning of eggshells and embryo problems.

Although the pesticide has been banned from use in the United States for a dozen years, experts predicted at least half of the residues present in 1972 would be present 10 years later — and DDT is still used in other countries.

Overall, bald eagle populations are on the increase. The 1984 National Wildlife Federation survey found 11,819 in 42 continental states, almost a thousand more than the count from 1983. The annual count is taken nationally each January.

In that count, Missouri had 975 eagles, second only to Washington state's 1,525. The Missouri total was the highest ever. The previous high count was 955 in 1981. Additionally, the Mississippi River is counted separately, and it logged 1,050 eagles. Many of those were counted within its run beside Missouri.

"The bald eagle isn't home free yet," says Jay Hair, executive vice president of the National Wildlife Federation. "However, slowly but surely it's making a comeback, and last year's survey demonstrates encouraging progress."

GOOSE FLOCK EXPANDING

The Mayo Brothers are noted for their health care facilities, but one of the most remarkable restorations to health they ever participated in has to do with geese. The brothers nurtured a flock of Canada geese many years ago, and subsequently the birds were identified as Giant Canada geese, a remnant of a population of resident-nesting Canada geese that were thought extinct.

From that flock in and around Rochester, Minnesota (which now numbers 20,000 birds) and others since discovered, Missouri and other states have developed resident-nesting Canada goose flocks. The Conservation Department has been in a goose restoration project for a number of years, using the Giant Canadas. Each June there is a "roundup" of geese, flightless then as they are molting wing feathers.

Last year, department personnel captured 274 young geese for transplant and release in new areas. Included were private land releases in Lincoln and Harrison Counties, plus releases in the department's Whetstone, Blind Pony and Bushwhacker Wildlife Areas and on Long Branch Reservoir near Macon.

This year's production of young was hampered by the cold, wet spring (as was production last year). A good example was at Department of Conservation headquarters in Jefferson City where the resident goose flock has contributed young for capture and transplant in the past, but this year produced no young.

The trap-and-transplant process has been an expanding one, with areas that once were newly stocked now serving as seed areas for further new stocking sites. For example, this year the department captured birds at Kansas City's Swope Park for release in Livingston County.

Dick Baskett, manager of the department's headquarters at Swan Lake National Wildlife Refuge and one of the Swope Park goose trappers, indulged himself in whimsy after the event. "The PPWB or Pied Piper White Bread system worked perfectly. The first pieces of bread attracted all the young geese as we walked toward the trap with all the geese following and snapping up the white bread we dropped. We had only two concerns: (1) Did we have enough bread (three loaves is about right) and (2) Would Steve Cooper's uncontrolled laughter spook the geese. These proved groundless, and the geese were led into the trap without a hitch."

Dear Backyard Bird Watcher:

The Saint Louis Audubon Society would like to invite anyone who enjoys feeding birds to participate in our backyard bird count.

The purpose of this survey is to determine the quantity of each species and identify the different species of birds that frequent backyard feeders during February and March. When compiled, the different surveys will help the Society determine species and quantity within the area -- and other areas of the country -- during these two months.

For participating, you will receive the results of the survey (when compiled) showing the various species and the number of each. The results will allow you to judge the rarity of the birds coming to your feeding station. By participating in the survey, you will have the opportunity to share your experiences with others who also enjoy the pleasure of watching birds come to the backyard feeders.

The survey forms are easy to fill out. These observations require no set day or length of time. The participant may choose the day and length of time each week that is most convenient for the observation. This may vary each week. The participant counts and records the maximum number of species observed at the feeder at one particular time during the week.

We thank you for your cooperation, and HAPPY BIRDING.

Saint Louis Audubon Society

SAINT LOUIS AUDUBON SOCIETY

BIRD FEEDING CHECKLIST

Month _____

Specie	Week 1 Date _____	Week 2 Date _____	Week 3 Date _____	Week 4 Date _____	
HAWKS					
Sharp-shinned					
Kestrel					
GAME BIRDS					
Turkey					
Bobwhite					
Rock Dove					
Mourning Dove					
WOODPECKERS					
Common Flicker					
Pileated					
Red-bellied					
Red-headed					
Yellow-bellied Sapsucker					
Hairy					
Downy					
SONG BIRDS					
Blue Jay					
Crow					
Titmouse					
White-breasted Nuthatch					
Red-breasted Nuthatch					
Brown Creeper					
Winter Wren					
Bewick's Wren					
Carolina Wren					
Mockingbird					
Catbird					
Brown Thrasher					
Robin					
Hermit Thrush					
Bluebird					
Gold-crown Kinglet					
Ruby-crown Kinglet					
Cedar Waxwing					
Shrike					
Starling					
Yellow-rumped Warbler					
House Sparrow					
Eastern Meadowlark					
Red-winged Blackbird					
Rusty Blackbird					
Brewer's Blackbird					
Common Grackle					
Cowbird					
Cardinal					
*Evening Grosbeak					
Purple Finch					
*Common Redpoll					
*Pine Siskin					

Goldfinch					
Rufous-sided Towhee					
Dark-eyed Junco					
Carolina Chickadee					
SPARROWS					
Tree					
Chipping					
Field					
*Harris'					
White-crowned					
White-throated					
Fox					
Lincoln's					
Swamp					
Song					
*RARITIES					
Green-tailed Towhee					
Red Crossbill					
White-winged Crossbill					
Pheasant					
Black-capped Chickadee					
Ring Turtle Dove					
Cooper's Hawk					
Swainson's Thrush					
Olive-backed Thrush					
Pine Grosbeak					
Black-headed Grosbeak					
Western Meadowlark					
Bohemian Waxwing					
Savannah Sparrow					
OTHER					

PLEASE MAIL THE MONTHLY SURVEY AT THE END OF EACH MONTH.

St. Louis Audubon Society
 2109 Briargate Lane
 St. Louis, MO 63122

SAINT LOUIS AUDUBON SOCIETY
BIRD FEEDING CHECKLIST

Month _____

Specie	Week 1 Date _____	Week 2 Date _____	Week 3 Date _____	Week 4 Date _____	
HAWKS					
Sharp-shinned					
Kestrel					
GAME BIRDS					
Turkey					
Bobwhite					
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Black-headed Grosbeak					
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Savannah Sparrow					
OTHER					

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 St. Louis, MO 63122

ADVENTURE EXPEDITIONS, The Natural History Division of McMullen Tours

Dr. Gene Wilhelm, Jr. appeared before the board of the Saint Louis Audubon Society last fall and told of the many tours he is conducting in 1985.

The Saint Louis Audubon Society is pleased to announce the following birding and natural history tours being offered in 1985:

Platte River Sandhill Cranes	March 27-31	\$399 + meals
Everglades and Southern Florida	April 4-14	\$899 + meals
Trinidad-Tobago Island Birds	April 10-20	\$1,595 inclusive
Southeast Arizona Deserts and Mountains	May 6-15, May 16-24, May 25-June 2	\$1,399 + meals
Churchill Subarctic Ecology	June 4-15	\$1,399 including famous train ride
Galapagos and Andean Ecuador	July 5-20	\$2,699 inclusive
Arctic Alaska Mountains and Tundra	July 5-15	\$2,999 inclusive
Costa Rica Cloud Forests	July 5-14	\$1,499 inclusive
Kenya's Birding Bonanza	August 9-25	\$2,799 inclusive

All trips will start and end in St. Louis or Kansas City and will be led by our own Dr. Gene Wilhelm, Jr. Gene has been an Auduboner since the age of eight, having worked as a volunteer with the Saint Louis Audubon Society, the Fort Smith Audubon Society, the Audubon Society of Western Pennsylvania, and the Bartramian Audubon Society. He was a member of the Audubon Society of Missouri for many years. In 1982-1983, Gene became Vice President of Education for the National Audubon Society in the New York City headquarters. While Vice President of Education, he completely revamped the Audubon Tours program and, in 1983, personally supervised the participation of 1,250 Audubon members and friends across the country in the most successful Audubon Explorations program. These marvelous environmental education experiences allowed Auduboners to visit nearly 20 countries in the world and learn about their birds, mammals, plant life, and the critical environmental problems facing these nations. All international trips carry optional undergraduate-graduate credit through McKeever Environmental Learning Center and the Pennsylvania System of Higher Education. Note that all trips are strictly limited to a few participants on a first come, first served basis; thus, prompt registration is essential. If interested in any trip, contact Gene at R.D. 3, Box 8, Slippery Rock, Pennsylvania 16057 or phone 412/794-2434 NOW.

SPECIAL EVENT ON MARCH 29

Walter Liddell will present a most interesting slide show at the Ethical Society, 9001 Clayton Road, at 8:00 p.m. Please save Friday, March 29, for this special event.

EAGLE CENSUS

Group	Site	Bald				Total
		Golden	Adult	Juvenile	Not Aged	
1.	<u>Saverton to Louisiana</u>					
	Saverton Dam					
	Parking @ Jct. Hwy. 79 to Rt. T					
	N. Scenic Overlook DuPont Refuge					
	S. Scenic Overlook DuPont Refuge					
	*Ted Shanks Refuge, W. Pumping Sta.					
	*Ted Shanks Refuge, S. Pumping Sta.					
2.	<u>Louisiana to Clarksville Dam 24</u>					
	Lou McKenna Residence					
	Louisiana Riverfront					
	Picnic Area S. of Buffalo Creek					
	Picnic Area S. of Little Calumet Cr.					
	Dundee Levee					
	Silo Park					
	*Delair Refuge Boat Landing					
	*Delair Refuge Lake					
3.	<u>Clarksville to Clarence Cannon Nat'l Ref.</u>					
	Just Below Dam					
	Gravel Fill Area S. of Clarksville					
	Port Marmac					
	Riverfront Cabins at Refuge					
4.	<u>Bryant's Creek to Norton Woods</u>					
	Riverfront Cabins below Bryant's Creek					
	Hamburg Ferry Dike					
	Timberlake Lodge					
	Old Westport Landing					
	Norton Woods					
5.	<u>Winfield Dam to Howard Ross'</u>					
	Howard Ross'					
	Kings Lake Area					
	Winfield Dam					
	Subtotal					
	TOTAL					

*Not included in original survey sites

WEATHER CONDITIONS:

Temperature	High	Low
Wind Velocity		
Precipitation		
Visibility and Cloud		
% River Frozen		
Severity of Winter		
Prior to Census		

COMMENTS: